23-INCH WIDE
TFT-LED MONITOR

USER MANUAL

Please read this manual thoroughly before use, and keep it handy for future reference.

CONTENTS

SAFETY INSTRUCTION ..... 2 ~ 3

CAUTIONS..... 4

FCC RF INTERFERENCE STATEMENT 5

INSTALLATION 6

CONNECTING WITH EXTERNAL EQUIPMENT..... 7

CONTROLS AND FUNCTIONS ..... 8 ~ 16

MOUNTING GUIDE..... 17

D-SUB CONNECTOR PIN ASSIGNMENTS 18

POWER MANAGEMENT 19

SPECIFICATIONS 20

TROUBLE SHOOTING GUIDE 21

This Monitor was
Manufactured by ISO 9001
Certified Factory

Important Safety Instruction

1. Read these instructions.
2. Keep these Instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers,stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug.
   Apolarized plug has two blades with one wider than the other.
   Agrounding type plug has two blades and a third grounding prong.
   The wide blade or the third prong are provided for your safety.
   If the provided plug does not fit into your outlet, consult an electrician for replacement of the bsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
11. Only use attachment/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus the apparatus has been exposed to rain or moisture does not operate normally or has been dropped.

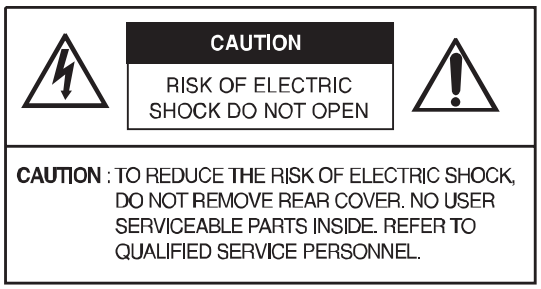
SAFETY INSTRUCTION

- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed no the apparatus.

14 Minimum distances(e.g. 10cm) around the apparatus for sufficient ventilation.

“WARNING – To reduce the risk of fire or electric shock, do not expose the apparatus to rain or moisture.”

“The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.”


CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER. NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated: dangerous voltage with in the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

CAUTIONS

CAUTION

The power supply cord is used as the main disconnect device, ensure that the socket-outlet is located/installed near the equipment and is easily accessible.

ATTENTION

Le cordon d`alimentation est utillsé comme interrupteur général. La prise de courant doit être située ou installée à proximité du matériel et être facile d`accès

CAUTION TO SERVICE PERSONNEL

POWER SUPPLY CORD IS USED AS MAIN POWER DISCONNECT DEVICE IN THIS PRODUCT. UNPLUG THIS PRODUCT FROM THE WALL OUTLET BEFORE REMOVING THE BACK COVER AND SERVICING

EMISSION CHARACTERISTICS TESTED BY SEMKO

THIS PRODUCT HAS BEEN TESTED AND HAS SHOWN COMPLIANCE WITH THE NATIONAL SPECIFICATIONS SUCH AS SWEDISH MPR 1990.10.(MPR II)

▶ **NEVER REMOVE THE BACK COVER**

Removal of the back cover should be carried out only by qualified personnel.

▶ **DO NOT USE IN HOSTILE ENVIRONMENTS**

To prevent shock or fire hazard, do not expose the unit to rain or moisture.

This unit is designed to be used in the office or home. Do not subject the unit to vibrations, dust of corrosive gases.

▶ **KEEP IN A WELL VENTILATED PLACE**

Ventilation holes are provided on the cabinet to prevent the temperature from rising.

Do not cover the unit or place anything on the top of unit.

▶ **AVOID HEAT**

Avoid placing the unit in direct sunshine or near a heating appliance.

▶ **TO ELIMINATE EYE FATIGUE**

Do not use the unit against a bright back ground and where sunlight or other light sources will shine directly on the monitor.

▶ **BE CAREFUL OF HEAVY OBJECT**

Neither the monitor itself nor any other heavy object should rest on the power cord.

Damage to a power cord can cause fire or electrical shock.

FCC RF INTERFERENCE STATEMENT

NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio, TV technician for help.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment.

▶ DOC COMPLIANCE NOTICE

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the radio interference regulation of Canadian Department of communications.

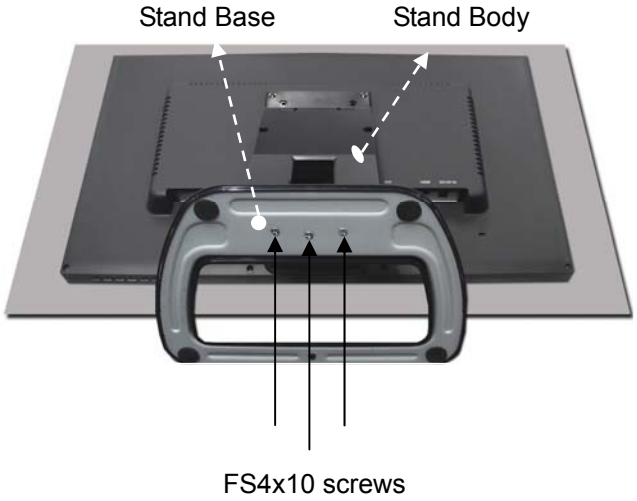
INSTALLATION

Before setting up the monitor, ensure that the power to the monitor and other attached devices are turned off.

※ Notice: Stand & Screws are optional

A. Connecting the stand

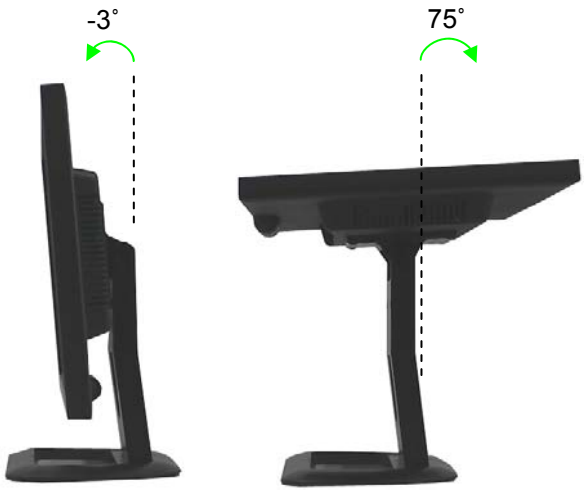
1. Place the monitor with its front facing downward on a soft cloth.
2. Assemble the Stand Base into the Stand Body in the correct direction using the included screws in the accessory box.



3. Once assembled take the monitor up carefully and face the front side.

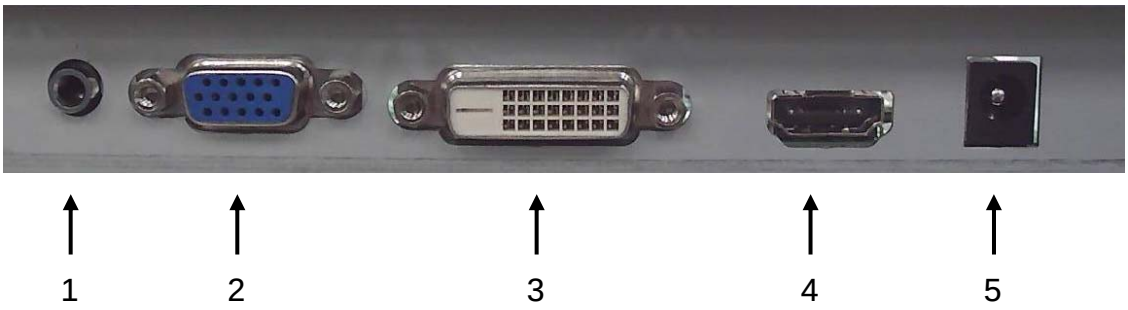
B. Positioning your display

Adjust the position of the panel in various ways for maximum comfort. (Tilt Range: -3°~75°)



CONNECTING WITH EXTERNAL EQUIPMENT

1. Rear Connection



1. PC STEROE IN.
2. VGA.
3. DVI.
4. HDMI.
5. DC 12V IN.

CONTROLS AND FUNCTIONS

2. Bottom Key Control

1. SOURCE/⏎

Selects VGA, DVI and HDMI inputs.

Selects an option in the OSD.

2. MENU

Activates or exits the OSD.

Moves previous menu or status in the OSD.

3, 4. AUTO/▼ & ▲

Moves another option in the OSD.

The ▲ button converts the aspect ratio as 16:9 or 4:3.

The **AUTO/▼** button is auto adjustment function in the VGA input.

5, 6. VOL(-) & VOL(+)

Adjusts the volume and menu settings.

The **VOL(-)** button is the **Sound off** function.

7. ⏻/ I

Turns the power on or off. There will be a few seconds delay before the display appears.

8. LED

Turned on with VGA, DVI and HDMI signals: blue color.

Turned on with no signal: red color.

Turned off: LED off.

CONTROLS AND FUNCTIONS

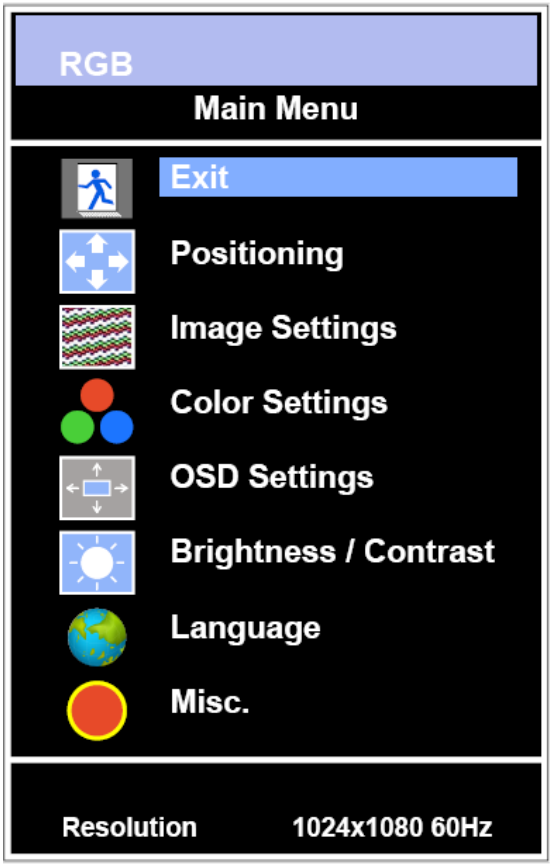
OSD Menu Description

All picture, sound settings and setup for the monitor can be adjusted in the OSD menu.

To adjust the OSD screen:

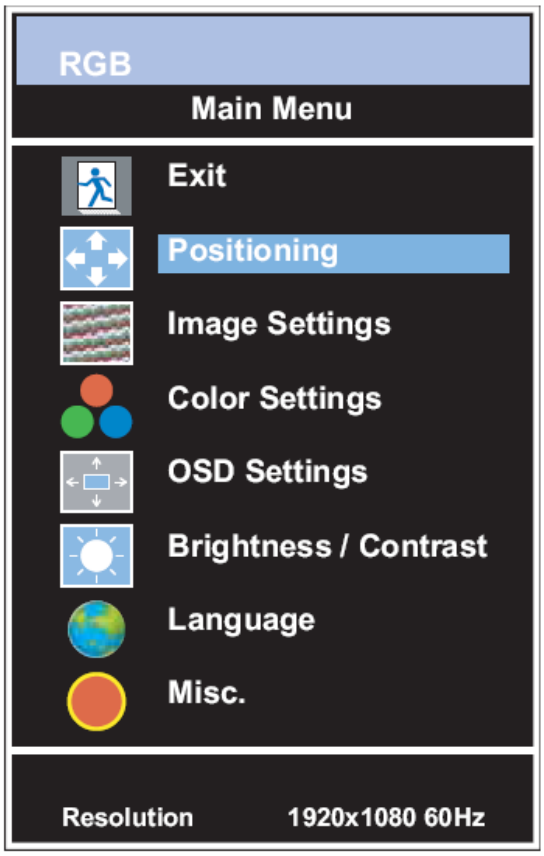
1. Press the **MENU** button to enter the OSD menu.
2. Press the ▲/▼ buttons to select the desired option. The selected option is yellow color.
3. Press the **SOURCE/** button twice to enter the sub-menu and adjust the item.
4. Change the value you wish to adjust by using the **VOL(-)** & **VOL(+)** buttons.
5. Press the **MENU** button twice to exit the sub-menu and the adjusted item.
6. Press the **MENU** button again to exit the OSD menu.

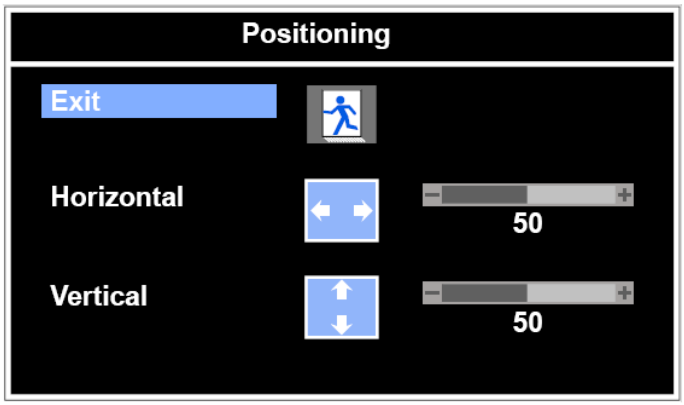
1. Exit



Option	Function
Exit	Exits the OSD menu.

2. Positioning

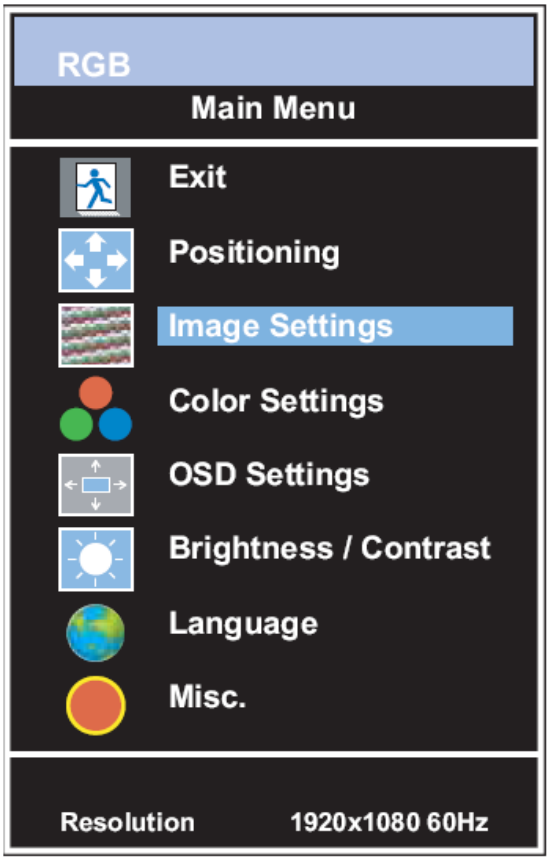


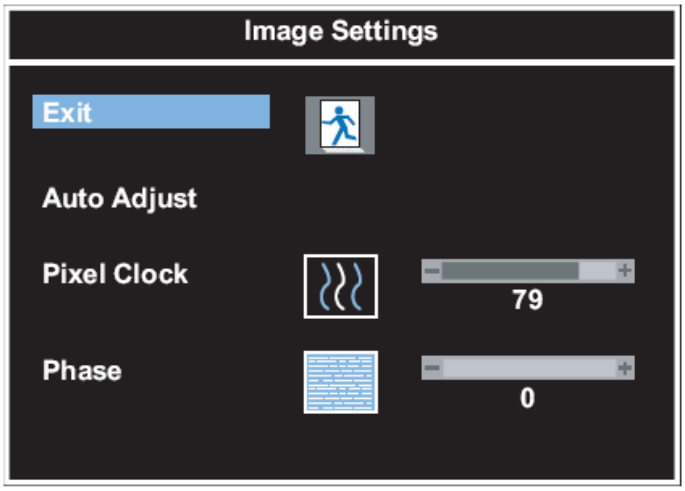


Option	Function	Value
Exit	Returns to previous menu.	
Horizontal	Adjusts the horizontally picture position.	0 ~ 100.
Vertical	Adjusts the vertically picture position.	0 ~ 100.

※Unavailable in DVI & HDMI inputs.

3. Image Settings

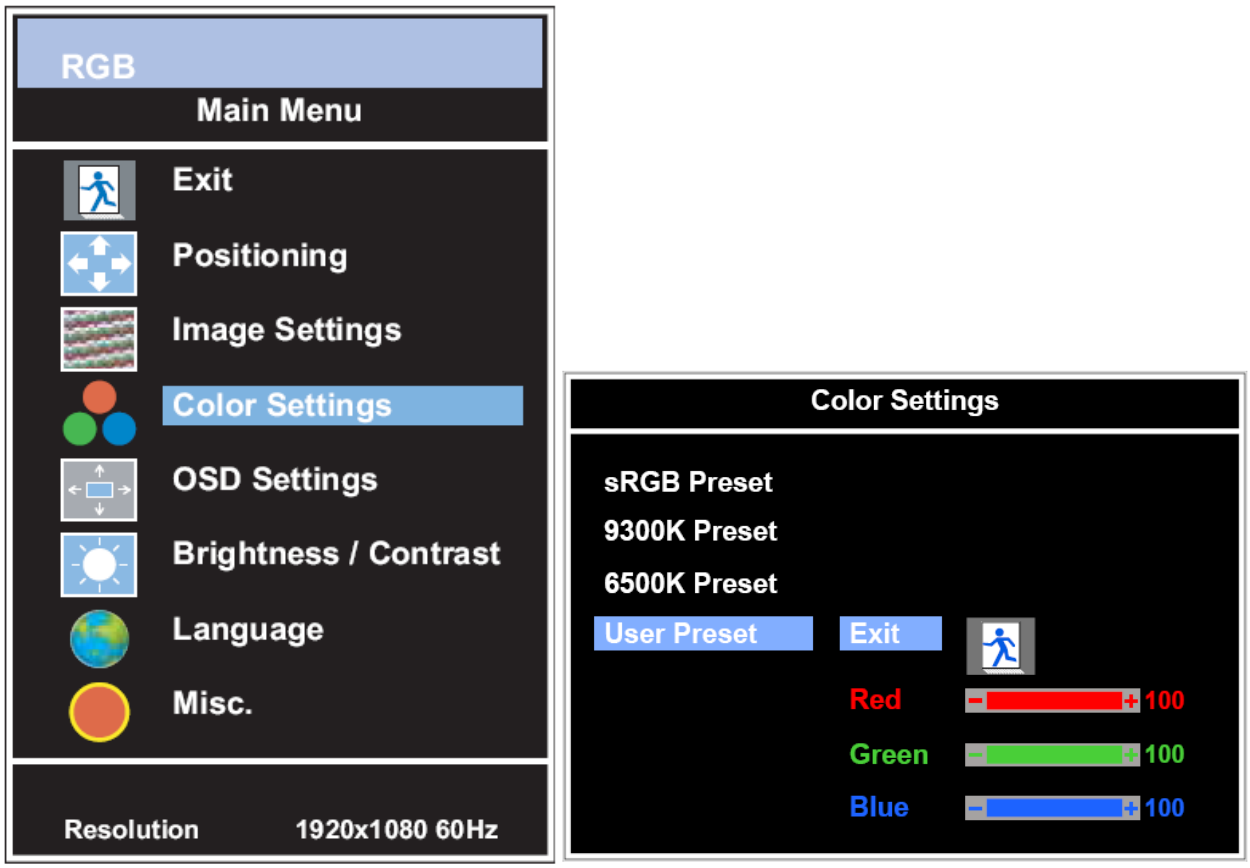




Option	Function	Value
Exit	Returns to previous menu.	
Auto Adjust	Auto geometry adjustment.	
Pixel Clock	Adjusts the vertical noise of screen image.	0 ~ 100.
Phase	Adjusts the number of horizontal picture elements.	0 ~ 100.

※Unavailable in DVI & HDMI inputs.

4. Color Settings

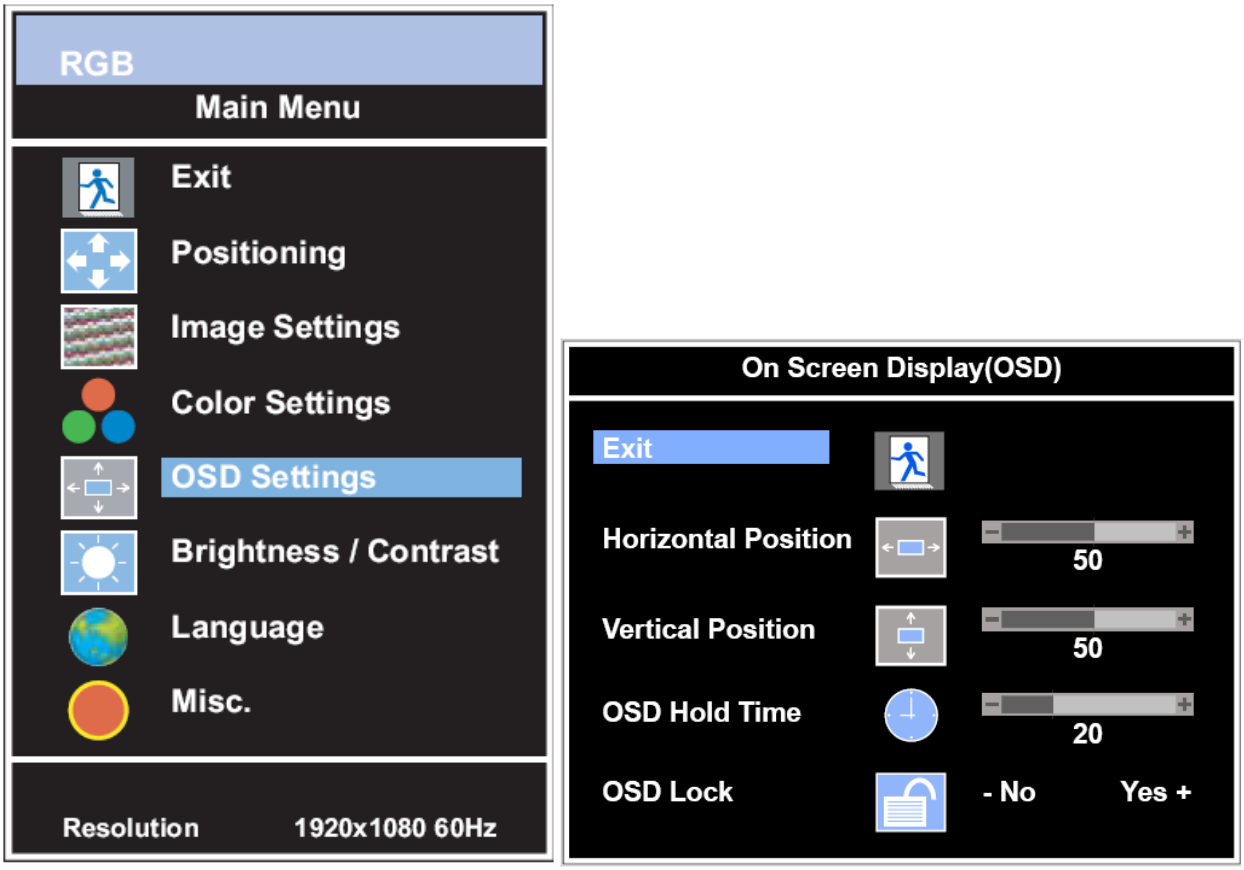


Option	Function	Value
Color Adjust	Adjusts red, green & blue colors of the picture.	0 ~ 100.
Color Temp	Adjusts color temperature of the picture.	sRGB Preset, 9300K Preset, 6500K Preset, User Preset[1)].

1) User Preset

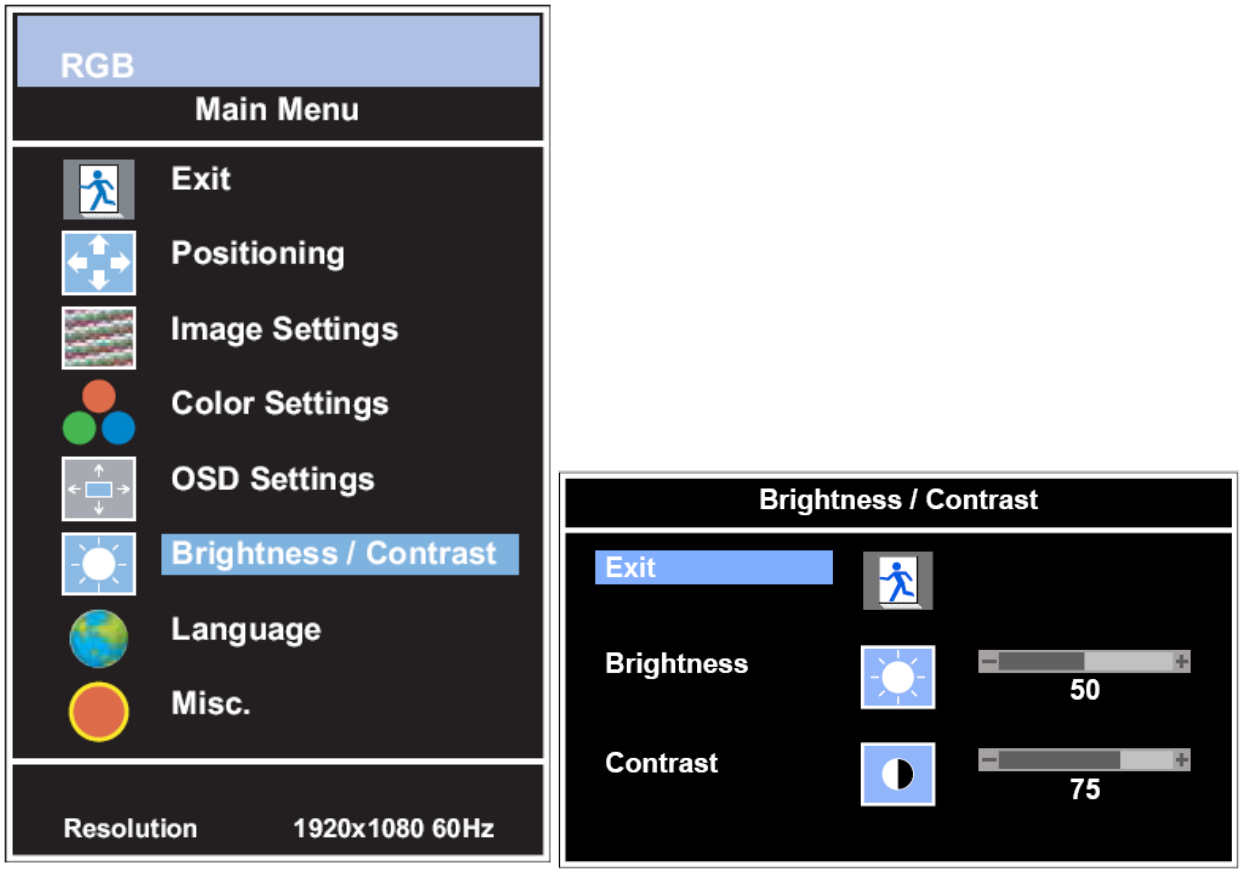
Option	Function	Value
Exit	Returns to previous menu.	
Red, Green, Blue	Adjusts red, green & blue colors of the picture.	0 ~ 100.

5. OSD Settings



Option	Function	Value
Exit	Returns to previous menu.	
Horizontal Position	Moves the horizontally OSD position.	0 ~ 100.
Vertical Position	Moves the vertically OSD position.	0 ~ 100.
OSD Hold Timer	Adjusts the display time of OSD.	0 ~ 100.
OSD Lock	Displays the menu of OSD settings only.	No / Yes

6. Brightness / Contrast



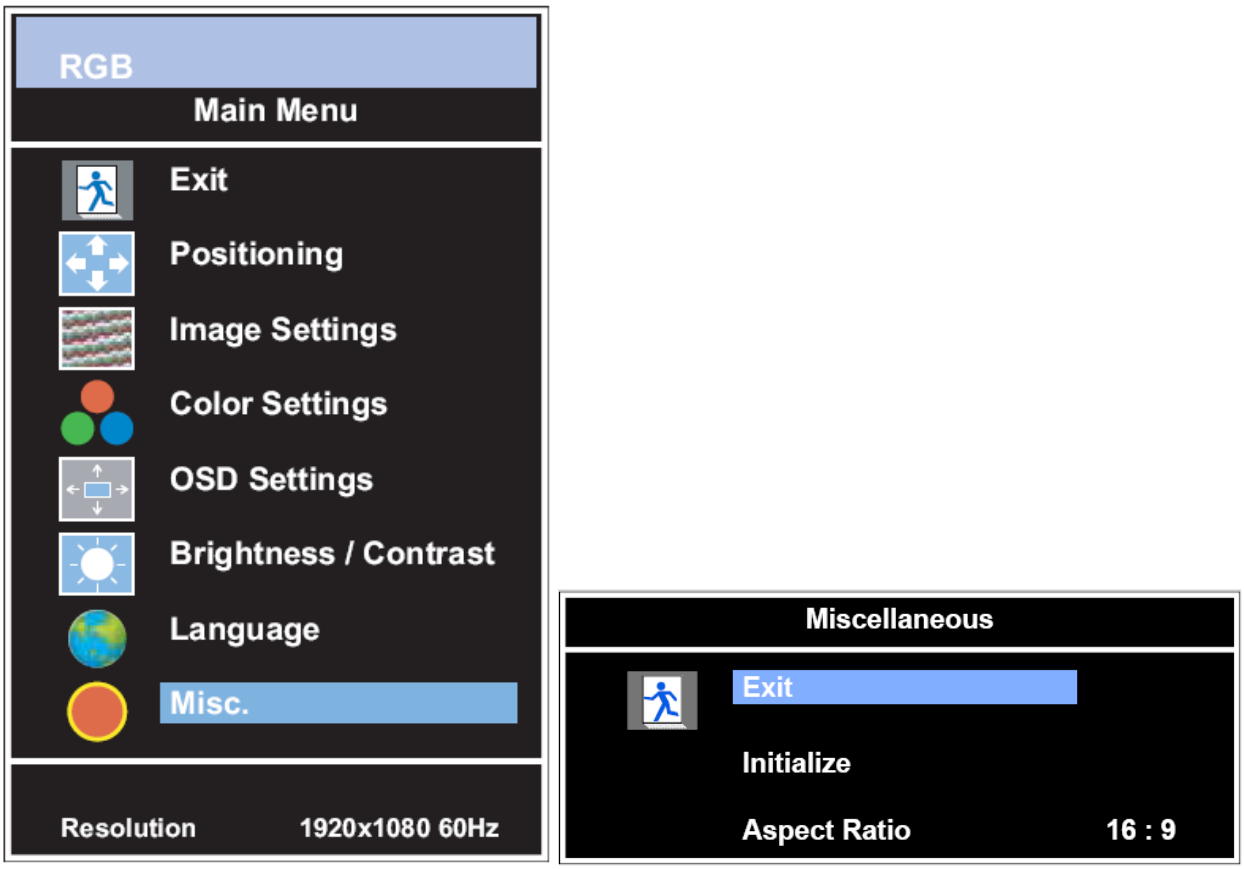
Option	Function	Value
Exit	Returns to previous menu.	
Brightness	Adjusts brightness of the screen.	0 ~ 100.
Contrast	Adjusts intensity of the image.	0 ~ 100.

CONTROLS AND FUNCTIONS

7. Language

Option	Function	Value
Exit	Returns to previous menu.	
Language	Sets the language of OSD menu.	English, Spanish, French, Deutsch & Korean.

8. Misc.

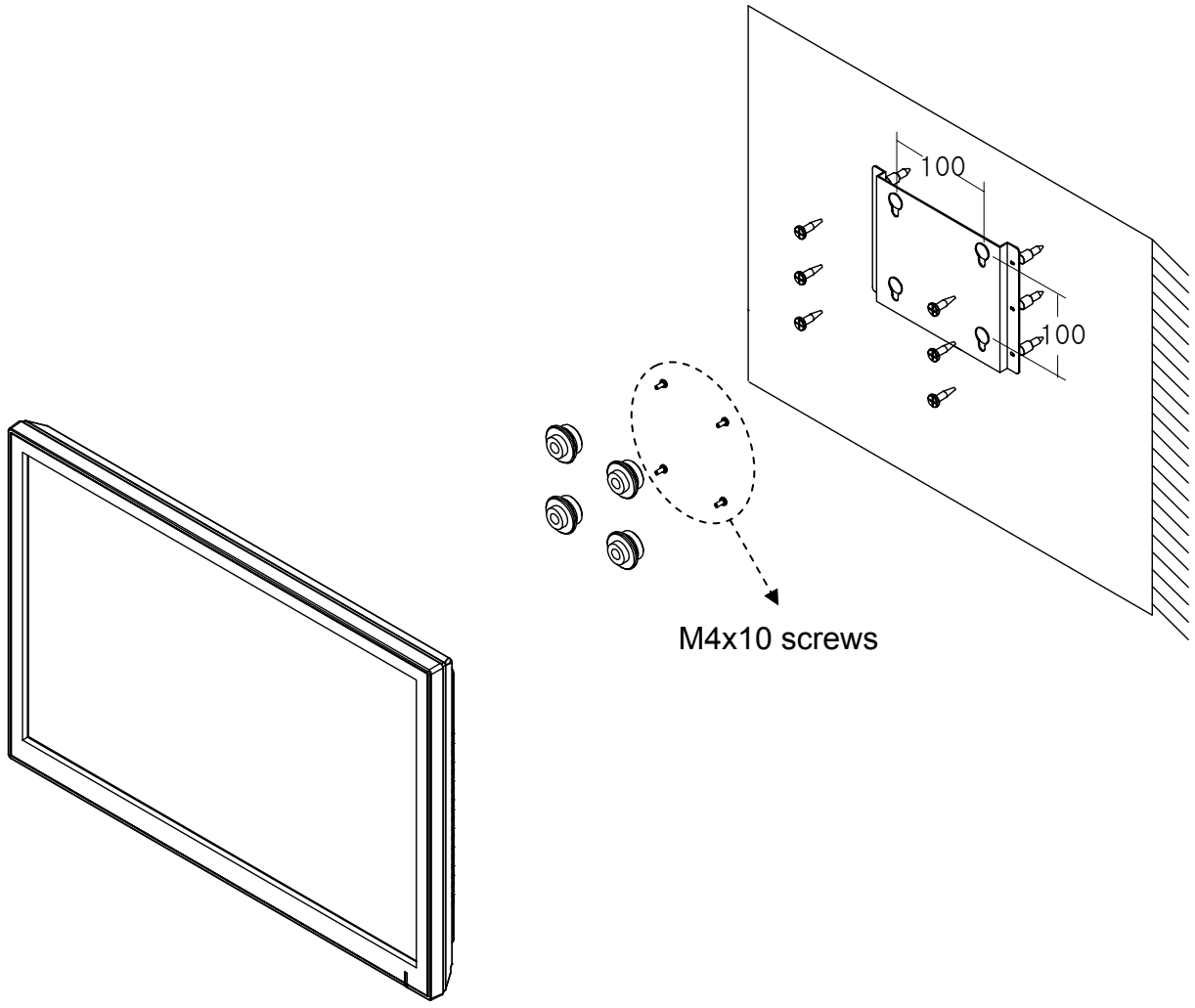


Option	Function	Value
Exit	Returns to previous menu.	
Initialize	Resets the monitor settings to the factory default.	
Aspect Ratio	Converts the aspect ratio.	16:9 & 4:3

MOUNTING GUIDE

Wall mounting (Optional)

The LCD monitor is suitable for wall mounting by using the VESA 100 standard wall mount (not included in the delivery).



※ Attention!

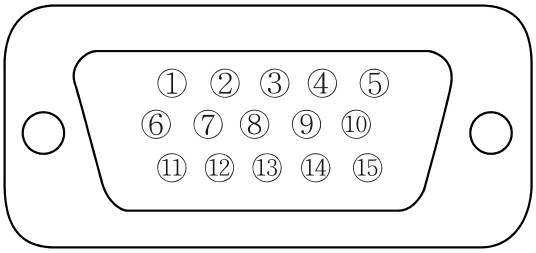
You must use four M4x10 screws to assemble this monitor and the wall mount bracket.

D-SUB CONNECTOR PIN ASSIGNMENTS

▶ **Pin Assignments**

Pin 1	RED VIDEO	9	
2	GREEN VIDEO	10	SIGNAL CABLE DETECT
3	BLUE VIDEO	11	GROUND
4	GROUND	12	SDA(for DDC)
5	GROUND	13	H-SYNC.(or H+V SYNC.)
6	RED GROUND	14	V-SYNC.
7	GREEN GROUND	15	SCL(for DDC)
8	BLUE GROUND		

D-SUB



▶ **Accessories**

1. Power cord.
2. Power adaptor
3. User manual.
4. VGA(RGB-PC) cable.
5. Stand & FS4x10 screws 3EA.
6. DVI cable (Optional).
7. Stereo cable (Optional).
8. Wall mount (Optional).

POWER MANAGEMENT

This monitor features a power management system to “power down” upon receipt of the VESA DPMS(The display power management signaling) from a VESA DPMS video card.
The VESA DPMS-compliant video card performs this signaling system through not sending horizontal, vertical, or sync signal.
This monitor enters an appropriate mode through identifying each of the three modes of the signaling system.

Power Consumption

Mode	23”
Turned On	< 24W
No Signal & Turned Off	< 1W

LED Indicator

The power management feature of the monitor is comprised of three stages:
Turned on(blue), no signal(red) and turned off(LED off).

Mode	LED	Monitor Operation
Turned On	Blue	Normal Operation
No Signal	Red	Not Operation
Turned Off	Off	Not Operation

SPECIFICATIONS

	23”
LCD Type	23″ Diagonal AM-TFT(Active-Matrix)
	Pixel pitch(mm): 0.2655(H) x 0.2655(V)
	Brightness: 250cd/m² (Typical)
	Contrast ratio: 1000:1(Typical)
	Viewing angle: 160°/160°(H/V)
	Response time: 5ms(Typical)
Resolution (H x V)	1920X1080@60Hz
Frequency	Horizontal: 31~80kHz Vertical: 56~75Hz
Input Signal	Digital Visual Interface (DVI 1.0 & HDCP 1.2)
	VGA (RGB-PC)
	HDMI Visual Interface (HDMI 1.3)
	PC Stereo in
Active Display Area (H x V)	509.76mm x 286.74mm
Packing Dimensions (W x D x H)	600mm x 160mm x 460mm (23.62” x 6.30” x 18.11”)
Weight	Net: 5.7kg (12.57 lbs)
	Gross: 7.9kg (17.42 lbs)
Electrical Ratings	12V ⎓ 2.0A (100-240V~, 50/60Hz)

▶▶ **NOTE:** Technical specifications are subject to change without notice.

TROUBLESHOOTING GUIDE

TROUBLE	TROUBLESHOOTING TIP
No image on display screen	1. Check that power cord of the Monitor have been connected securely into wall outlet or grounded extension cable or strip. 2. Power switch should be in the ON position and LED is lit. 3. Check that the Brightness and/or the Contrast adjustments of the Display have not been turned down to minimum levels.
"NO SIGNAL" message on screen	1. The signal cable should be completely connected to the video card/computer. 2. The video card should be completely seated in its slot and the computer is switched ON.
Display image is not centered, too small or too large in PC mode	Push the down key in front side or Auto key in remote controller.
Vertical or Horizontal noise is present in the picture	Adjust Clock and Phase in the OSD.

WEEE Symbols

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

MEMO

MEMO

MEMO

P/N : L39ME0271 Rev.1